

LISTING OF THE CLAIMS

Claims 1, 19, 26, 27 and 29 have been amended. Claims 2, 21 and 28 have been canceled. Claims 1, 3-20, 22-27, and 29-32 remain pending. The following is a complete listing of the claims, which replaces all previous versions and listings of the claims.

1. (currently amended) A method of generating a random number for a cryptographic security subsystem of a processor-based device, the method comprising the acts of:

- (a) detecting occurrence of a first type of triggering event;
- (b) capturing one or more bits of data from a free-running timer and
writing the one or more bits of data to a seed pool upon termination of the first type of triggering event; and
- (c) repeating acts (a) and (b) until the seed pool is full.

2. (canceled)

3. (original) The method as recited in claim 1, wherein the first type of triggering event has a variable duration.

4. (original) The method as recited in claim 1, wherein the processor-based device is coupled to a communication link, and wherein act (a) comprises the act of receiving a communication from the communication link.

5. (original) The method as recited in claim 4, wherein the communication link comprises a network.

6. (original) The method as recited in claim 4, wherein the communication link comprises the Internet.

7. (original) The method as recited in claim 1, comprising the acts of:

- (d) detecting occurrence of a second type of triggering event;
- (e) writing one or more bits of data to the seed pool upon termination of the second type of triggering event; and
- (f) repeating act (e) each time the second type of triggering event is detected.

8. (original) The method as recited in claim 7, wherein act (e) comprises masking the one or more bits of data into the seed pool upon termination of the second type of triggering event.

9. (original) The method as recited in claim 8, wherein act (e) comprises capturing the one or more bits of data from a free-running timer upon termination of the second type of triggering event.

10. (original) The method as recited in claim 7, wherein the second type of triggering event is different than the first type of triggering event.

11. (original) The method as recited in claim 7, wherein the second type of triggering event is a cycle of power applied to the processor-based device.

12. (original) The method as recited in claim 1, wherein the seed pool comprises a state bit indicative of a state of the seed pool, and wherein the method comprises the act of examining the state bit to determine whether the seed pool is full.

13. (original) A method of initializing a seed pool for generating a random number for a cryptographic security subsystem of a processor-based device, the method comprising the acts of:

- (a) writing a plurality of bits of data to a seed pool, the plurality of bits of data having a signature value;
- (b) detecting occurrence of a first type of triggering event;
- (c) writing one or more bits of data to the seed pool upon termination of the first type of triggering event, the one or more bits of data altering the signature value of the seed pool; and
- (d) enabling the cryptographic security subsystem when more than a predetermined portion of the signature value of the seed pool has been altered.

14. (original) The method as recited in claim 13, wherein the first type of triggering event comprises a cycle of power applied to the processor-based device.

15. (original) The method as recited in claim 13, wherein the first type of triggering event is a reboot of the processor-based device.

16. (original) The method as recited in claim 13, wherein act (c) comprises the act of masking the one or more bits of data into the seed pool.

17. (original) The method as recited in claim 13, wherein act (c) comprises the act of capturing the one or more bits of data from a free-running timer.

18. (original) The method as recited in claim 13, comprising the acts of:
detecting a second type of triggering event;
determining if the seed pool is full; and
writing one or more bits of data to the seed pool upon termination of the
second type of triggering event if the seed pool is not full.

19. (currently amended) A processor-based device comprising:
a host processing system, the host processing system comprising a processor;
a communications management system in communication with the host
processing system;

a memory system in communication with the host processing system and the communications management system,

wherein the communications management system comprises:

an interface controller;

a free-running timer;

a non-volatile memory device to store a seed pool; and

security logic in communication with the interface controller and

the non-volatile memory device, the security logic

configured to generate a cryptographic key to establish a

secure communication session between the processor-

based device and an external device in communication

with the processor-based device via the interface controller,

wherein the security logic generates the cryptographic key

from the seed pool stored in the non-volatile memory

device, and wherein the security logic is configured to:

detect occurrence of a first type of triggering event;

determine whether the seed pool is fully populated;

capture one or more bits of data from the free-running

timer; and

write the one or more bits of data to the seed pool upon

termination of the first type of triggering event if

the seed pool is not fully populated.

20. (original) The processor-based device as recited in claim 19, wherein the security logic is configured to:

detect occurrence of a second type of triggering event;

write one or more bits of data to the seed pool upon termination of the second type of triggering event.

21. (canceled)

22. (original) The processor-based device as recited in claim 19, wherein the first type of triggering event has a variable duration.

23. (original) The processor-based device as recited in claim 19, wherein the first type of triggering event comprises receipt, by the interface controller, of a communication from an external device.

24. (original) The processor-based device as recited in claim 23, wherein the interface controller comprises a network interface controller.

25. (original) The processor-based device as recited in claim 23, wherein the interface controller comprises an RS232 interface controller.

26. (currently amended) The processor-based device as recited in claim ~~19~~ 20, wherein the processor-based device comprises a main power supply to supply power

to the processor-based device, and wherein the second type of triggering event comprises a cycle of the power supplied by the main power supply.

27. (currently amended) A processor-based device comprising:

a host processing system, the host processing system comprising a processor;

a communications management system in communication with the host
processing system; and

a memory system in communication with the host processing system and the
communications management system,

wherein the communications management system comprises:

a free-running timer;

an interface controller;

a non-volatile memory device to store a seed pool comprising a
plurality of data bits; and

security logic in communication with the interface
controller and the non-volatile memory device, the security
logic configured to establish a secure communication
session between the processor-based device and an external
device in communication with the processor-based device
via the interface controller, and wherein the security logic
is configured to:

capture one or more bits of data from the free-running

timer and write the one or more bits to the seed

pool upon termination of a first type of

triggering event;

determine whether the plurality of data bits in the seed

pool has at least a portion of a signature value;

and

disable establishment of the secure communication

session if the plurality of data bits has at least a

portion of the signature value.

28. (canceled)

29. (currently amended) The processor-based device as recited in claim ~~28~~27, comprising a main power supply to supply power to the processor-based device, and wherein the first type of triggering event comprises a cycle of the power supplied by the main power supply.

30. (original) The processor-based device as recited in claim 27, wherein the security logic is configured to:

detect a second type of triggering event;

determine whether the seed pool is fully populated; and

write one or more data bits to the seed pool upon termination of the second

type of triggering event if the seed pool is not fully populated.

31. (original) The processor-based device as recited in claim 30, wherein the second type of triggering event comprises receipt of a communication from the external device via the interface controller.

32. (original) The processor-based device as recited in claim 31, wherein the interface controller comprises a network interface controller.